IRON CORNER

IV Iron Table

	Iron Dextran	Iron Sucrose	Ferric Gluconate	Ferumoxytol	Ferric Carboxymaltose	Ferric Derisomaltose
Trade Name	INFeD (Sanofi Aventis)	Venofer (American Regent Inc)	Ferrlecit (Sanofi Aventis US)	Feraheme (AMAG Pharmaceuticals)	Injectafer (American Regent Inc)	Monoferric (Pharmacosmos Therapeutics Inc) iron isomaltoside 1000—the generic name initially approved in the European Union and other markets
FDA Approved Indication	Iron deficiency in patients whom oral administration is unsatisfactory or impossible.	Venofer is an iron replacement product indicated for the treatment of iron deficiency anemia in adult patients with chronic kidney disease (CKD).	Iron deficiency anemia in adult patients and in pediatric patients age 6 years and older with chronic kidney disease receiving hemodialysis who are receiving supplemental epoetin therapy.	Iron deficiency anemia in adult patients with chronic kidney disease (CKD).	Iron deficiency anemia in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron; or who have non-dialysis dependent chronic kidney disease.	Iron deficiency anemia in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron; who have non-hemodialysis dependent chronic kidney disease.
Black Box Warning	Yes. Anaphylactic-type reactions, including fatalities, have followed the parenteral administration of iron dextran injection.	No	No	No	No	No
Route of Administration	IV injection IV infusion IM injection (not recommended)	IV injection IV infusion	IV injection IV infusion	IV infusion	IV injection IV infusion	IV injection IV infusion
Maximum FDA Approved Single Dose	100 mg	400 mg	125 mg	510 mg	750 mg	1000 mg
Dosing	Doses less than or equal to 300 mg, slow IV push at a rate not to exceed 50 mg/minute; or diluted in 100-250 ml normal saline. For administration of a 1000mg total dose infusion, the total calculated dose should be diluted in 500 ml (range of 250 to 1000 ml) of normal saline. After a test infusion, the solution may be infused over 1 or more hours.	Adult Patients with CKD on dialysis Administer Venofer 100 mg undiluted as a slow intravenous injection over 2 to 5 minutes, or as an infusion of 100 mg diluted in a maximum of 100 mL of 0.9% NaCl over a period of at least 15 minutes, per consecutive hemodialysis session. Venofer should be administered early during the dialysis session. 2.2 Adult Patients CKD not on dialysis Administer Venofer 200 mg undiluted as a slow IV injection undiluted over 2 to 5 minutes on 5 different occasions over a 14-day period. There is limited experience with administration of an infusion of 500 mg of Venofer, diluted in a	Adult Dosage and Administration The recommended dosage of Ferrlecit for the repletion treatment of iron deficiency in hemodialysis patients is 10 mL of Ferrlecit (125 mg of elemental iron). Ferrlecit may be diluted in 100 mL of 0.9% sodium chloride administered by intravenous infusion over 1 hour per dialysis session. Ferrlecit may also be administered undiluted as a slow intravenous injection (at a rate of up to 12.5 mg/min) per dialysis session. For repletion treatment most patients may require a cumulative dose of 1000 mg of elemental iron administered over 8 dialysis sessions. Ferrlecit has been administered at sequential dialysis.	The recommended dose of Feraheme is an initial 510 mg intravenous injection followed by a second 510 mg intravenous injection 3 to 8 days later. Administer Feraheme as an undiluted intravenous injection delivered at a rate of up to 1 mL/sec (30 mg/sec). The recommended Feraheme dose may be readministered to patients with persistent or recurrent iron deficiency anemia.	Up to 750 mg can be delivered in a single dose. Give 2 doses separated by at least 7 days for a total cumulative dose of up to 1500 mg per course1 Administer intravenously by Infusion over at least 15 minutes; Slow push injection at the rate of approximately 100 mg (2 mL) per minute over at least 7.5 minutes; For patients weighing less than 50 kg (110 lb), give each dose as 15 mg/kg body weight. When administered via infusion, dilute up to 750 mg of iron in no more than 250 mL of sterile 0.9% sodium chloride injection, USP, such that the concentration of the infusion is not <2 mg of iron per mL and	For patients weighing 50 kg or more: Administer 1,000 mg of Monoferric as an intravenous infusion. For patients weighing less than 50 kg: Administer Monoferric as 20 mg/kg actual body weight as an intravenous infusion. Repeat Monoferric treatment if iron deficiency anemia reoccurs. Withdraw the appropriate volume of Monoferric and dilute in 100 mL to 500 mL of 0.9% Sodium Chloride Injection, USP. Final diluted concentration should be more than 1 mg iron/mL. Administer the prepared solution via intravenous infusion over at least 20 minutes.

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		maximum of 250 mL of 0.9% NaCl, over a period of 3.5 to 4 hours on day 1 and day 14. 2.3 Adult Patients with CKD receiving peritoneal dialysis Administer Venofer in 3 divided doses, given by slow intravenous infusion, within a 28-day period: 2 infusions each of 300 mg over 1.5 hours 14 days apart followed by one 400 mg infusion over 2.5 hours 14 days later. Dilute Venofer in a maximum of 250 mL of 0.9% NaCl.			administer over at least 15 minutes. When administering as a slow intravenous push, give at the rate of approximately 100 mg (2 mL) per minute. A total dose infusion of 1000mg in 250mL NS over 15 minutes has been successfully administered in clinical trials.	
Pediatric Indication	Yes. > 4 months of age	No	Yes. >6 years of age	No	No	No
Pediatric Dosing	Greater than 10 Kg: Administer 100 mg iron dextran IV per day until total calculated dose is given. 5-10 Kg: Administer 50 mg iron dextran IV per day until the total calculated dose is given. Infants greater than 4 months but less than 5 Kg: Administer 25 mg iron dextran IV per day until the total calculated dose is given.	Pediatric Use Safety and effectiveness of Venofer in pediatric patients have not been established.	The recommended pediatric dosage of Ferrlecit for the repletion treatment of iron deficiency in hemodialysis patients is 0.12 mL/kg Ferrlecit (1.5 mg/kg of elemental iron) diluted in 25 mL 0.9% sodium chloride and administered by intravenous infusion over 1 hour per dialysis session. The maximum dosage should not exceed 125 mg per dose.	N/A	N/A	N/A
Lactating Women	Traces of unmetabolized iron dextran are excreted in human milk.	It is not known whether iron sucrose is excreted in human milk.	It is not known whether Ferrlecit is excreted in human milk. Benzyl alcohol present in maternal serum is likely to cross into human milk and may be orally absorbed by a nursing infant. Caution should be exercised when Ferrlecit is administered to a nursing woman [see Use in Specific Populations].	It is not known whether ferumoxytol is present in human milk.	The available published data on the use of ferric carboxymaltose in lactating women demonstrate that iron is present in breast milk. However, the data do not inform the full potential exposure of iron for the breastfed infant. Among the breastfed infants, there were no adverse events reported that were considered related to ferric carboxymaltose exposure through breastmilk.	The available data on the use of Monoferric in lactating women demonstrate that iron is present in breastmilk. However, the data do not inform the potential exposure of iron for the breastfed child or the effects on milk production.

References

InFeD [package insert]. Madison, NJ: Allergan USA, Inc.; 2020
Venofer [package insert]. Shirley, NY, American Regent; 2019.
Ferrlecit [package insert]. Bridgewater, NJ: Sanofi Aventis US; 2020.
Feraheme [package insert], Waltham, MA: AMAG Pharmaceuticals; 2020.
Injectafer [package insert]. Shirley, NY: American Regent; 2020.
Monoferric [package insert]. Morristown, NJ: Pharmacosmos Therapeutics Inc.; 2020.

Note: The US FDA has amended the pregnancy labeling rule for prescription drug products to require labeling that includes a summary of risk, a discussion of the data supporting that summary, and relevant information to help health care providers make prescribing decisions and counsel women about the use of drugs during pregnancy. Pregnancy categories A, B, C, D, and X are being phased out.

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